

War on Hunger

A Report from The Agency for International Development

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OFFICE OF THE
WAR ON HUNGER



War on Hunger

A Report from The Agency for International Development

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Agency for International Development.

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Readers are invited to submit news items, original
manuscripts (including speeches) and photos on any
aspect of the War on Hunger. Contents of this
publication may be reprinted or excerpted freely.

Peace will never be secure so long as:

- Seven out of ten people on earth cannot read or write;
- Tens of millions of people each day—most of them children—are maimed and stunted by malnutrition.
- Diseases long conquered by science still ravage cities and villages around the world.

If most men can look forward to nothing more than a lifetime of back-breaking toil which only preserves their misery, violence will always beckon, freedom will ever be under siege.

It is only when peace offers hope for a better life that it attracts the hundreds of millions around the world who live in the shadow of despair.

Twenty years ago America resolved to lead the world against the destructive power of man's oldest enemies. We declared war on the hunger, the ignorance, the disease, and the hopelessness which breed violence in human affairs.

We knew then that the job would take many years. We knew then that many trials and many disappointments would test our will.

But we also knew that, in the long run, a single ray of hope—a school, a road, a hybrid seed, a vaccination—can do more to build the peace and guard America from harm than guns and bombs. . . .

The programs I propose are as important and as essential to the security of this nation as our military defenses. Victory on the battlefield must be matched by victory in the peaceful struggles which shape men's minds.

No Retreat, No Waste

The foreign aid program for fiscal 1969 is designed to foster our fundamental American purpose: To help root out the causes of conflict and thus ensure our own security in a peaceful community of nations.

For fiscal 1969, I propose:

- *An economic aid appropriation of \$2.5 billion.*
- *A military grant aid appropriation of \$420 million.*
- *New and separate legislation for foreign military sales.*
- *A five-year program to develop and manufacture low-cost protein additives from fish, to help avoid the tragic brain damage now inflicted on millions of children because of malnutrition in their early years.*
- *That the United States join with other nations to expand the International Development Association, the development-lending affiliate of the World Bank. For every two dollars the United States contributes, other nations will contribute three dollars.*
- *That the Congress authorize a contribution to new Special Funds of the Asian Development Bank.*
- *Prompt appropriation of the annual contribution to the Fund for Special Operations of the Inter-American Development Bank.*

- *A further authorization and appropriation of callable funds for the Inter-American Development Bank to stand behind the Bank's borrowing in private money markets.*

Common Effort for Common Good

I pledge to the Congress and to the people of America that these programs will be carried out with strict attention to the six basic principles of foreign aid administration we announced last year.

1. Self-Help

Self-help is the fundamental condition for all American aid. We will continue to insist on several dollars of local investment for every dollar of American investment. We will help those—and only those—who help themselves. We will not tolerate waste and mismanagement.

TO BUILD THE PEACE

*Excerpts from President
Johnson's Message to the
Congress on Foreign Assistance,
February 8, 1968*

2. Multilateralism

This year, 90 percent of our AID loans will be made as part of international arrangements in which donors and recipients alike carry their fair share of the common burden.

America now ranks fifth among donor countries in terms of the share of its national product devoted to official foreign aid. Japan increased her aid by nearly 50 percent last year. Germany has increased her aid budget despite fiscal restraints which have curtailed domestic welfare programs. Great Britain is maintaining aid levels despite severe financial problems. With the signing of the International Grains Agreement, other wealthy nations will for the first time be obligated to contribute food and money to the world-wide war on hunger.

This year we must take another important step to sustain those international institutions which build the peace.

The International Development Association, the World Bank's concessional lending affiliate is almost without funds. Discussions to provide the needed capital and balance of payments safeguards are now underway. We hope that these talks will soon result in agreements among the wealthy nations of the world to continue the critical work of the Association in the developing countries. . . .

3. Regionalism

Last year I joined with the Latin American Presidents to renew, reaffirm and redirect the Alliance for Progress.

The nations of free Asia began a general survey of their joint transportation and education needs, while work proceeded on projects to bring power, water and the other tools of progress to all.

The African Development Bank, financed entirely by Africans, opened its doors and made its first loan.

The coming year will present three major opportunities for the United States to add new momentum to these regional efforts:

A. The Inter-American Development Bank.

This Bank stands at the center of the Alliance for Progress. Last year, the Congress authorized three annual contributions of \$300 million each to the Bank's Fund for Special Operations. The second of these contributions should be appropriated this year. . . . *I urge the Congress to authorize \$412 million in callable funds, of which \$206 million will be needed this year.*

B. The Asian Development Bank

This Bank has asked the United States, Japan, and other donors to help establish Special Funds for projects of regional significance—in agriculture, education, transportation and other fields. Last October I requested that the Congress authorize a United States contribution of up to \$200 million. . . . *I urge that the Congress take prompt and favorable action on this request.*

C. The African Development Bank

This Bank has also asked for our help to establish a small Special Fund for projects which cannot or should not be financed through the Bank's Ordinary Capital. *We must stand ready to provide our fair share, with full safeguards for our balance of payments.*

4. Priority for Agriculture and Population Planning Victory Vital in War on Hunger

Victory in the War on Hunger is as important to every human being as any achievement in the history of mankind.

The report of 100 experts assembled last year by the President's Science Advisory Committee on the World Food Supply rings with grim clarity. Their message is clear: The world has entered a food-population crisis. Unless the rich and the poor nations join in a long-range, innovative effort unprecedented in human affairs,

this crisis will reach disastrous proportions by the mid-1980's.

That Report also reminded us that more food production is not enough. People must have the money to buy food. They must have jobs and homes and schools and rising incomes. Agricultural development must go hand-in-hand with general economic growth.

AID programs are designed *both* to stimulate general economic growth and to give first priority to agriculture. In India, for instance, about half of AID-financed imports this year will consist of fertilizer and other agricultural supplies.

We have made a good start:

- India is harvesting the largest grain crop in her history. Fertilizer use has doubled in the past two years. Last year five million acres were planted with new high yield wheat seeds. By 1970 this will increase to 32 million acres.
- Brazil, with AID help, has developed a new grass which has already added 400,000 acres of new pastureland and increased her annual output of beef by 20,000 metric tons.
- The Philippines is expecting a record rice crop this year which will eliminate the need to import rice.

Boost in Funds for Agriculture

In the year ahead, AID will increase its investment in agriculture to about \$800 million—50 percent of its total development aid. In addition, I will shortly propose an extension of the Food for Freedom program to provide emergency food assistance to stave off disaster while hungry countries build their own food production.

We must also tap the vast storehouse of food in the oceans which cover three-fourths of the earth's surface. I have directed the Administrator of the Agency for International Development and the Secretary of the Interior to launch a five-year program to:

- Perfect low-cost commercial processes for the production of Fish Protein Concentrate.
- Develop new protein-rich products that will fit in a variety of local diets.
- Encourage private investment in Fish Protein Concentrate production and marketing, as well as better fishing methods.
- Use this new product in our Food for Freedom program to fortify the diets of children and nursing mothers.

But food is only one side of the equation. If populations continue to grow at the present rate, we are only postponing disaster not preventing it.

In 1961 only two developing countries had programs to reduce birth rates. In 1967 there were 26.

As late as 1963, this government was spending less than \$2 million to help family planning efforts abroad. In 1968, we will commit \$35 million and additional amounts of local currency will be committed. In 1969 we expect to do even more. . . .

(Continued on page 10)

AID's POPULATION POLICY

by William S. Gaud, Administrator, Agency for International Development.



EDITOR'S NOTE: *The four principles of AID's population policy are taken from a statement by Mr. Gaud before the Senate Subcommittee on Foreign Aid Expenditures, headed by Senator Ernest Gruening of Alaska, on February 1, 1968*

The population policy of the Agency for International Development is based on four fundamental principles:

The first principle is that overpopulation and underdevelopment go hand-and-hand. This tie is both biological and economic. Overpopulation in the less developed countries leads to malnutrition, which cuts energy and kills initiative. Malnutrition also shortens the life span and saps productivity. These personal deprivations add up to national failures in development. We have evidence, too, that infant and maternal malnutrition can cause mental retardation—again, personal tragedies which hobble national growth. Finally, national resources used to care for weak, ill, overcrowded, under-employed people are resources diverted from development.

In sum, when a country's production gains are matched by population gains—*nothing is gained*. The country is not moving ahead. It is treading water, and it is in trouble. The progress of the poor nations will depend largely upon their success in slowing down their rates of population increase. They will not be able to offer their people better lives and opportunities until their resources and populations are in proper balance.

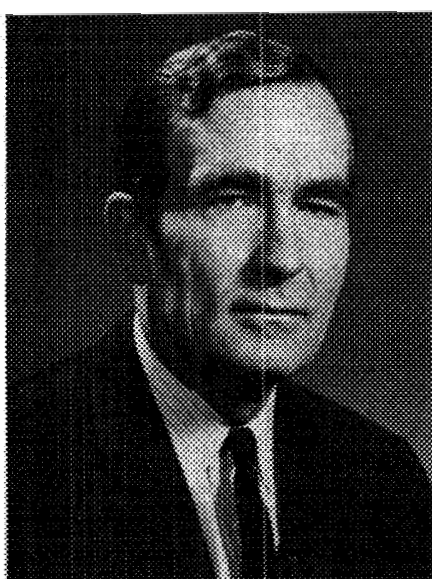
The second principle is that the government of every nation with a population problem—whether developed or developing—should do its utmost to increase the knowledge and practice of family planning among its citizens. Our role is to encourage and help the developing nations with this task.

The third principle is respect for the sovereignty and the sensibilities of the nations we assist. The population question is as delicate as it is urgent. Over half the people in the developing world now live under governments that have policies of reducing birth rates. But some countries, even though they are aware of the seriousness of the problem, and are working on it, either do not welcome outside help in this field or do not want it on a large scale. Our work in the population field must be carried on in such a way as not to raise political problems. The family planning programs we assist must be host nation programs—not our programs. They should avoid labels marked "made in the USA."

This principle is based upon Section 291 of the Foreign Assistance Act of 1967. It declares that "every nation is and should be free to determine its own policies and procedures with respect to problems of population growth and family planning within its own boundary." Consistent with this, we will not assist any program unless we are asked to do so.

The fourth principle is that AID will support no family planning or population program unless it is voluntary. This means several things. For one thing, each developing country must decide for itself what types of programs best suit its requirements and its people. We will not force a particular type of program on any country. For another, we will assist only those programs in which individuals are free to participate or not as they see fit, and where they have a choice of means. In short, we want no part of either international coercion or individual coercion. We do not make family planning a condition of aid.

Guided by these principles, and acting in accordance with our determination to give programs relating to population growth the highest priority, AID is determined to do everything it can to help the developing countries face up to and overcome their population growth problems.



FOREIGN ECONOMIC DEVELOPMENT and U.S. AGRICULTURAL POLICY

by Irwin R. Hedges

Acting Assistant Administrator for War on Hunger

Agricultural development and its relation to the food/population problem has moved to the position of top priority in the U.S. foreign economic assistance program. The world food problem has occupied some of our best minds, both in and out of Government.

The absence of such efforts will not necessarily mean mass famine or starvation on a large scale. Rather, inadequate efforts will mean the continuation of conditions of semi-starvation affecting large population groups, recurring food crises, and continued political unrest and upheavals in many parts of the world. Because the consequences of failure are long-term and difficult to grasp, the task of obtaining continuing support for what needs to be done is rendered all the more difficult.

The report of the President's Science Advisory Committee on the world food problem, commonly referred to as the PSAC Report, is a monumental piece of work which does much to put the issues we face in proper perspective. The basic conclusion to be derived from that report is that the world food problem is capable of solution, but a massive effort *beginning now*, and continuing for the next 20 years, is required by both the developed and less developed countries, if a serious crisis is to be averted. This joint effort calls for massive capital investments, massive technical assistance, as well as continued food aid.

If public support is to be assured, an intensive effort will have to be made to develop public understanding of what aid is all about. A basis must be developed for a job requiring patient and sustained effort over a period of decades. Enlightened self-interest, from the long view, is still one valid basis on which to build public support. It is not a cliché to say that the establishment of durable and lasting peace is inseparably linked to finding a solution to the food/population/economic development problems confronting most of the nations of Asia, Africa and South America.

In a number of other ways—the prospects of new markets, the benefits to our domestic economy—our self-interest is served in giving aid. But self-interest is only a part of the justification for aid. In a general sense, we give to the Community Chest for self-interest reasons; we know that work of many agencies supported by the Community Chest will in the long run reduce crime, or enable some people to be self-supporting who might otherwise have to be supported from public funds. Basically, however, we give to the Community Chest because it is right. We feel a responsibility toward our less fortunate fellow men. This is also a large element of why we engage in foreign aid—because it is right that we should. This is an American tradition. And we must not let critics make us ashamed of this motivation.

Existing legislation provides a basis for the United States to develop a mutually advantageous partnership with the developing countries in launching a concerted attack on the food/population problem. More and more, there is developing the philosophy that U.S. aid should be directed toward economic support and related to the efforts the recipient countries themselves undertake to develop more dynamic economics.

The Foreign Assistance Appropriation Act of 1968, passed by the Congress in the closing days of the last session, added significant new statements on the purposes of development assistance and in self-help criteria.

A new Section 207 requires that in the administration of development assistance particular emphasis be given to programs for agricultural development, education, health and family planning programs and for building democratic institutions.

A new Section 208 defines criteria for self-help performance in countries receiving development assistance. Selected for emphasis are criteria relating to food production, storage and distribution, encouragement of private enterprise, concentration of resources on key development areas such as agriculture, health and education, rather than unnecessary military expenditures.

Aid and Self-Help

Public Law 480 legislation reflects a similar concern of the Congress that our assistance be related to the self-help efforts of recipient countries.

The PL 480 legislation started as a surplus disposal operation. With the disappearance of our surpluses we have been able to move in the direction of programs geared to the needs of the recipient countries.

The 1966 Food for Peace Act requires that the President "take into account efforts of friendly countries to help themselves toward a greater degree of self reliance, including efforts to meet their problems of food production and population growth."

Each sales agreement must describe the program which the recipient country is undertaking to improve its production, storage and distribution of agricultural commodities and provide for termination of the agreement whenever the President finds that this program is not being adequately developed.

Following an analysis of a country's agricultural development program, priority agricultural development needs are identified jointly with the host government requesting PL 480 assistance. Specific self-help measures are incorporated into each sales agreement. Provision is also made for regular reports on progress in carrying out the self-help program. These reports will be reviewed carefully to judge whether progress is satisfactory and to identify areas which should be emphasized in the future.

Our basic objective is not to help the developing countries achieve self-sufficiency in food production. Rather, it is to help the recipient countries develop their economies to the point that at some future date they can import on commercial terms what they can not produce economically themselves.

Policy on Agriculture

AID policy with regard to assistance to agricultural production is guided by the following principles:

- A. In providing technical assistance or monetary assistance in the production of agricultural commodities, particular emphasis is given the growing, harvesting, storage, handling, processing and distribution of food crops for domestic use.

- B. Assistance may also be given to the production of feed crops for domestic use and to the production of food and feed crops for export where it is necessary to earn foreign exchange to purchase foods and other goods which cannot be produced efficiently within the country but which are deemed essential for economic development: *Provided*, that due consideration shall be given to the continued expansion of markets for U.S. agricultural commodities or the products thereof.

- C. Assistance shall not be given to increase the production of non-food crops in world surplus. However, consideration may be given on a case-by-case basis to assistance to improve storage, handling, processing and distribution of non-food crops in world surplus provided the United States is a net importer of such non-food crops and such assistance is designed primarily to effect savings beneficial to the local economy without any appreciable effect on the volume of exports.

Adherence to these principles will require self discipline on our part. It was relatively easy for the Congress to include in PL 480 legislation self-help provisions when our surpluses disappeared and we momentarily had to ration our grain exports to assure that commercial markets were supplied and essential PL 480 needs met. Can we count upon public support to continue to relate aid to self-help in periods of ample supplies and farmer distress over falling prices, if these should recur? Or will we see a resurgence of the philosophy of the '50's when the Congress admonished the foreign aid agency to do nothing that would increase the competition, real or potential, for U.S. agricultural exports?

Clearly, this is an area in which policy makers must exercise prudence. There must be an affirmative finding that efforts to expand production are economically justified.

Fortunately, the state of agricultural development in most AID recipient countries is such that it makes economic sense to assign a high priority to agricultural development. On the other hand, it would make little economic sense to assist a country to develop an export potential for commodities that are more or less in chronic world surplus, or where world prices are remunerative only to highly efficient, low cost producers.

Long-Term Solutions

Until the developing countries achieve long-term solutions to their food/population problems they will need access to food imports on concessional terms to feed their populations. American farmers can therefore count on PL 480 to continue to be one of the major channels through which U.S. assistance is funneled.

AID will continue to work closely with the U.S. Department of Agriculture to assure that U.S. agricultural production program decisions take fully into account food aid requirements as well as domestic consumption, commercial exports and stock requirements. It is unlikely, however, that for the foreseeable future we shall need to use all of the productive capacity of U.S. agriculture to meet world food needs.

Indeed, it would not be in the interests of U.S. farmers to do so, even if it were politically possible. The long run interest of U.S. farmers lies in expanding commercial exports. Experience demonstrates that our foreign economic assistance contributes to this end.

If we allowed massive food aid to substitute for assistance in helping recipient countries develop their own economies, the effect would be to postpone the day when they could stand on their own feet and become commercial markets for U.S. farm products.

Food aid is thus supplementary and complementary to other forms of economic assistance, in addition to filling the existing gap between food availabilities and food requirements.

(Continued on page 14)



Senator Pell

In his opening remarks, Herbert J. Waters, AID Assistant Administrator for the War on Hunger, emphasized that "to develop a low-cost product with high consumer acceptance, effectively marketed, private industry is the only answer; there is no place else to go for it."

Mr. Waters added that, "We must have far greater involvement by private industry in the War on Hunger if we are to prevent mass starvation and the major turmoil and unrest which would accompany starvation."

The Conference featured an explanation of the FPC Demonstration Program by George K. Parman, head of AID's Food from the Sea Service; a "coffee break" complete with FPC-enriched sweet rolls, breads, and pasta products, put on by Dr. Olivia Hammerle, nutritionist for the Department of Interior's Bureau of Commercial Fisheries, and three workshop sessions where the

participants could help the AID program to attract industry's participation. The workshops were aimed at confronting, in Mr. Waters' words, "the challenge to the ingenuity of American industry: how can we, government and industry working together in close partnership, develop high protein foods and get them to the customers who are outside the supermarket society?" The results of the workshops are scheduled for publication at a later date.

The featured speaker at the closing session was Senator Claiborne Pell of Rhode Island, who expressed his concern that "mankind is not fighting hard enough against hunger." He added:

"I am convinced that vital munitions for this war on hunger can be derived by more skillful exploitation of ocean resources. One excellent category, of course, is the newly approved fish protein concentrate. It

is a particularly hopeful item on the inventory of food from the sea. The list will become longer as present imaginative schemes are perfected. The science of aquiculture is one that carries a great potential. When we develop fish husbandry as we have animal husbandry, the jump in available fish nutrient should be astronomical. So I urge that America harness its underwater plowhorses in earnest. The harvest may be vital in the war on hunger."

Included among the participants at the meeting were staff members of various Congressional offices and representatives of foreign embassies and the World Bank.

FPC was approved as a human food additive last year by the U.S. Food and Drug Administration. Construction of a pilot FPC plant by the Bureau of Commercial Fisheries was authorized by Congress, and is now being negotiated by the Bureau.

Dr. Hammerle



Mr. Parman



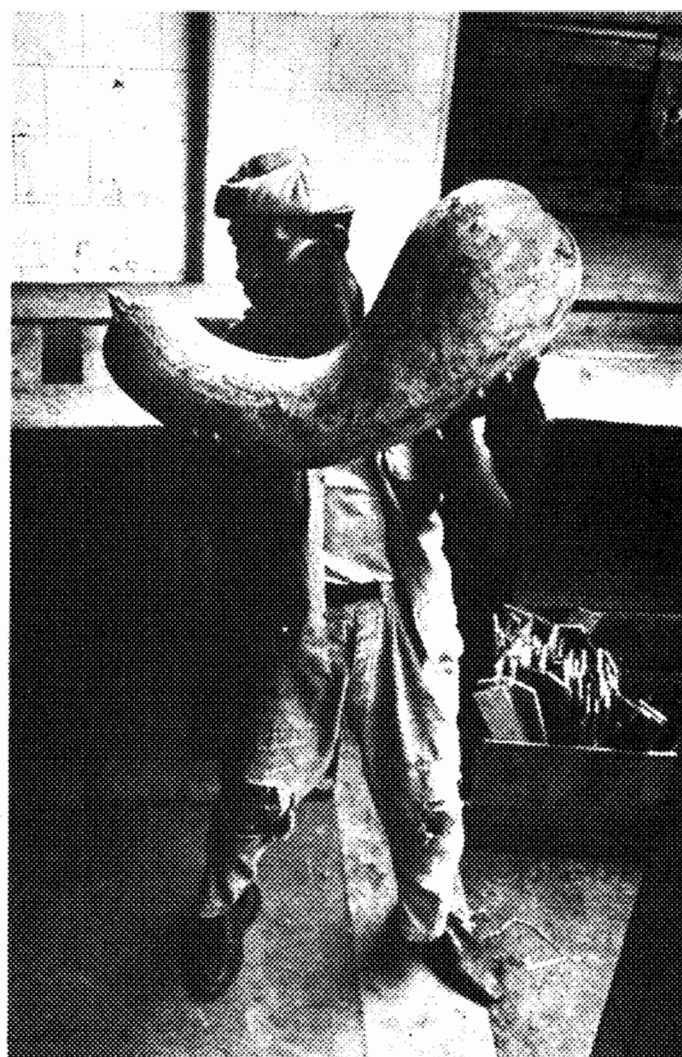
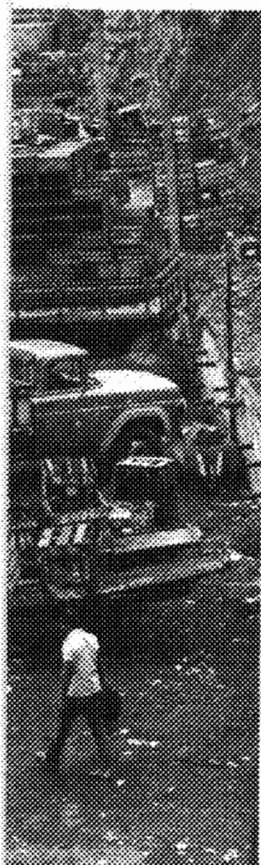
BRAZIL'S

Market Information Service

Producing food is only part of the problem of feeding hungry people. It is equally important to get the produce to market—to the right market at the right time. Otherwise spoilage and waste will take their toll, food needed elsewhere will be lost, and the farmer will not get a fair price for his crop. The answer is information: day-to-day market information direct to the farmers so that they may know where and when their produce is needed.

Market prices and needs are determined in the markets themselves. Photo at right shows a corner of the wholesale produce market in Rio de Janeiro. Market Information Service reporters gather data there early in the morning, and have their reports ready for the wire before noon. Market information is disseminated by radio (right center) and printed in the daily newspapers. Below, a farmer checks the paper while the work of loading oranges goes on.





U. S. Foreign Aid assisted in setting up Brazil's Market Information Service, in the person of AID agricultural specialist Lance G. Hooks of Arkansas. The photo at right shows Mr. Hooks (right) with the head of the Information Service, Luiz Bastos Lima, at an orange packing plant in the state of Rio de Janeiro. Senor Lima and Mr. Hooks seem to be spot-checking the product. A more unusual product is seen in the upper-right photo. The Market Information Service helped this man get his giant squash and other produce to the market in Rio when demand was good and prices high. The photo at left typifies a condition that the Brazilian authorities are trying to change. The old man selling bananas, or trying to, represents the kind of haphazard marketing that hungry nations can no longer afford, and that Brazil's Market Information Service was designed to supplant. Nothing could be seemingly less dramatic than facts and figures on the state of the wholesale produce markets, but Brazilian farmers are learning that the reports of the Market Information Services are valuable, and deserve their best attention.



Photos: Carl Purcell for AID.

(The President from page 2)

5. Balance of Payments Protection

... In 1963, the dollar outflow from foreign aid expenditures was over \$600 million. Last year, it was down to \$270 million. I have already directed that even this figure be reduced in 1968 to less than \$170 million. More than nine dollars of every ten dollars AID spends will buy American goods and services. And the repayments of prior loans will more than offset the small outflow from new loans.

Moreover, our AID programs have a favorable long range impact on our balance of payments by building new markets for our exports.

6. Efficient Administration

Over the past few years AID has reduced by 20 percent the number of U.S. employees serving overseas in posts other than Vietnam. Last month I directed a 10 percent reduction in the number of employees overseas in all civilian agencies. In addition, AID is further improving and streamlining its over-all operations.

A Creative Partnership With Free Enterprise

Foreign aid must be much more than government aid. Private enterprise has a critical role. Last year:

- All 50 states exported American products financed by AID.
- The International Executive Service Corps operated 300 projects in which experienced American businessmen counseled local executives.
- Nearly 8,000 American scientists and engineers shared their know-how with developing countries under the auspices of VITA Corporation, a private U.S. non-profit organization.
- More than 120 American colleges and universities contributed to AID technical assistance programs.
- Thirty-three American states supported development work in 14 Latin American countries under AID's Partners of the Alliance program.

All of these efforts will be sustained and expanded in the coming year. We are committed to maximum encouragement of private investment in and assistance to the developing countries. We shall remain so.

A Year of Opportunity, A Year of Risk

Latin America—I propose appropriations of \$625 million for the Alliance for Progress.

The American Presidents met at Punta del Este last spring to reaffirm a partnership which has already produced six years of accomplishment:

- The nations of Latin America have invested more than \$115 billion, compared with \$7.7 billion in American aid.
- Their tax revenues have increased by 30 percent.
- Their gross national product has risen by 30 percent.

A new course was charted for that partnership in the years ahead. At Punta del Este, the American nations agreed to move toward economic integration. They set

new targets for improvements in agriculture, in health, and in education. They moved to bring the blessings of modern technology to all the citizens of our Hemisphere...

- *Brazil* increased food production by 10 percent in 1967 and achieved an overall real economic growth of 5 percent. Inflation was cut from 40 percent in 1966 to 25 percent in 1967.
- *Chile*, under President Frei's Revolution in Freedom, has launched a strong program of agricultural and land reforms, while maintaining an overall growth rate of about 5 percent.
- *Colombia* has also averaged 5 percent growth while undertaking difficult financial and social reforms.
- *Central America* leads the way toward the economic integration so important to the future of Latin America. Trade among these countries has grown by 450 percent in the six years of the Alliance—from \$30 million in 1961 to \$172 million in 1967.

This peaceful Alliance holds the hopes of a Hemisphere. We have a clear responsibility to do our share. Our partners have an equally clear responsibility to do theirs. We must press forward together toward mutual security and economic development for all our people.

Large Stakes in Three Countries

Near East-South Asia—I recommend \$706 million for the Near East and South Asia.

Half the people we seek to help live in India, Pakistan and Turkey. The fate of freedom in the world rests heavily on the fortunes of these three countries...

India must have the foreign exchange to take advantage of this year of opportunity. A farmer cannot use the miracle seed which would double or triple his yield unless he can get twice as much fertilizer as he used for the old seeds. A fertilizer distributor cannot sell that much more fertilizer unless it can be imported. An importer cannot buy it unless he can get foreign exchange from the Government. India will not have that foreign exchange unless the wealthy countries of the world are willing to lend it in sufficient quantities at reasonable terms...

Pakistan, though also plagued by drought, has continued its excellent progress of the past few years. Her development budget has been increased. Her military budget has been reduced. Agricultural production is growing faster than population. Private investment has exceeded expectations.

Now the Government of Pakistan has undertaken further steps to reform its economic policies—to free up its economy and give more play to the market. These reforms are acts of wisdom and courage, but they require foreign exchange to back them up...

Turkey's economic record is outstanding. Her gross national product has grown an average of six percent annually since 1962. Industrial output has grown nine percent per year. Food production is growing much faster than population growth.

Turkey's own savings now finance some 90 percent of her gross investment. Difficult problems remain, but we may now realistically look forward to the day—in the early 1970's—when Turkey will no longer require AID's help.

Shift Continues in Africa

Africa—I recommend \$179 million for Africa.

Just one year ago, I informed the Congress of a shift in emphasis in our aid policy for Africa. We moved promptly to put it into effect:

- There will be 21 U.S. bilateral programs in Africa in Fiscal 1969, compared to 35 last year.
- Most of our bilateral programs will be phased out in 11 more countries in the following year.
- Expanded regional and international projects will meet the development needs of the countries where bilateral aid is ended.

The past year has provided further evidence that this support for regional economic institutions and projects is a sensible approach to Africa's problems. It expands markets. It encourages economies of scale. It gives meaningful evidence of our concern and interest in African development.

This is not a policy of withdrawal from Africa. It is a policy of concentration and of maximum encouragement of regional cooperation. . . .

Reconstruction in Vietnam

Vietnam—I recommend a program of \$480 million to carry forward our economic assistance effort in Vietnam.

This effort will be intensified by the need to restore and reconstruct the cities and towns. . . .

Defense of Vietnam requires more than success on the battlefield. The people of Vietnam are building the economic and social base to preserve the independence we are helping them to defend. . . .

In the coming year, we will:

- Improve our assistance to refugees and civilian casualties. The wages of aggression are always paid in the blood and misery of the innocent. Our determination to resist aggression must be matched by our compassion for its helpless victims.
- Intensify agricultural programs aimed at increasing rice production by 50 percent in the next four years.
- Concentrate our educational effort toward the Government's goal of virtually universal elementary education by 1971.
- Stress, in our import programs, the key commodities needed for agricultural and industrial growth. . . .

Urgency in East Asia

East Asia—I recommend \$277 million for East Asia.

For 20 years resistance to attack and subversion has been current and urgent business for the nations of East

Asia. The United States has helped to make this resistance effective. We must continue to do so, particularly in Laos and Thailand. . . .

- For the last three years, the Korean economy has grown by a phenomenal 10 percent per year; domestic revenues have doubled since 1965; exports have grown tenfold in the last seven years. Population growth has fallen from 2.9 percent in 1962 to 2.5 percent today, and a strong national population program is contributing to further reductions. We are now able to plan for orderly reduction of U.S. economic aid as the capacity for self-support grows. Despite recent pressure from the North, the momentum and self-confidence of this gallant nation must be—and will be—maintained.
- Indonesia has stepped away from the brink of communist domination and economic chaos. She has undertaken the hard course of stabilization and rehabilitation and is moving toward development. She needs help from the U.S. and other donors, who are working together with the International Monetary Fund and the World Bank. It is overwhelmingly in our interest to provide it.

America's Choice

Foreign aid serves our national interest. It expresses our basic humanity. It may not always be popular, but it is right.

The peoples we seek to help are committed to change. This is an immutable fact of our time. The only questions are whether change will be peaceful or violent, whether it will liberate or enslave, whether it will build a community of free and prosperous nations or sentence the world to endless strife between rich and poor.

Foreign aid is the American answer to this question. It is a commitment to conscience as well as to country. It is a matter of national tradition as well as national security.


Last year some Americans forgot that tradition. My foreign aid request, already the smallest in history, was reduced by almost one-third.

The effects of that cut go much deeper than the fields which lie fallow, the factories not built, or the hospitals without modern equipment.

Our Ambassadors all over the developing world report the deep and searching questions they are being asked. Has America resigned her leadership of the cause of freedom? Has she abandoned to fate the weak and the striving who are depending on her help? . . .

I said in my State of the Union address that it is not America's resources that are being tested but her will. This is nowhere more true than in the developing countries where our help is a crucial margin between peaceful change and violent disaster.

I urge the Congress to meet this test.



How TAIWAN Improved its Agriculture

by Raymond P. Christensen, Director

Foreign Development & Trade Division, Economic Research Service, USDA

How Taiwan (Formosa) improved its agriculture has been studied in detail by the Economic Research Service of the U.S. Department of Agriculture under a participating agency service agreement with the Agency for International Development. The agreement provides for research on factors associated with changes and differences in agricultural production in developing countries.

Other countries for which studies are being made include Greece, Mexico, Brazil, Colombia, India, and Nigeria. Detailed findings from the Taiwan study will be reported in "Taiwan's Agricultural Development: Its Relevance for Developing Countries Today," now being published by the Economic Research Service.

Taiwan has become an important export market for U.S. products—\$333 million in 1967, including \$111 million worth of agricultural products. Taiwan's rapid economic growth made possible cessation of U.S. economic aid and technical assistance in 1965.

Increases in agricultural productivity have helped Taiwan achieve a high rate of economic growth. Taiwan's national income measured in real terms has increased at a yearly rate of 7.6 percent since the early 1950's. Total agricultural output has increased at a yearly rate of 4.5 percent (Figure 1). Gains in agricultural productivity—larger outputs per acre, per worker, and per unit of all resources combined—account for more than half of the growth in total agricultural output since the early 1950s.

Improved Living Levels

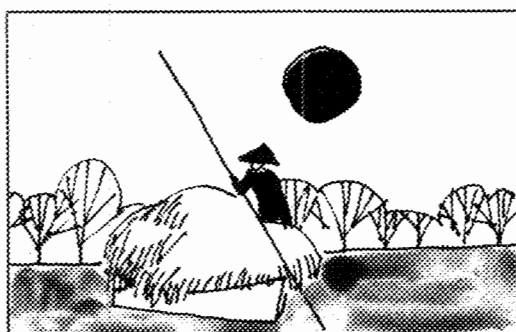
Gains in agricultural productivity made possible the transfer of capital

and workers from agriculture to industry and at the same time improved living levels for farm people. The share of total population living on farms decreased from 70 percent in 1930 to 45 percent in 1967. Although there has been a large migration from farms to cities, total farm population has continued to increase. However, farm population may begin to decrease in the next few years.

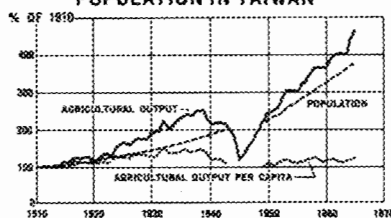
Taiwan's experience in achieving large gains in agricultural productivity should be of interest to many other developing countries because they share many points of similarity: rapid population growth, limited land resources, tropical climate, need for irrigation improvements, a long colonial history and the like. Taiwan has many unique points in its development that might be adopted or adapted by other countries.

Taiwan is not much larger than the state of Maryland. It has only 0.17 acre of cultivable land per capita, compared with 2 acres in the United States, but the average value of crop production per acre is now about 6 times higher than in this country.

During the Japanese colonial period, 1895-1945, Japan effected an energetic development program, designed chiefly to grow food for Japan, which laid a basic foundation for the rapid rate of agricultural growth achieved later. Japan put money into infrastructure of the island, constructing irrigation projects and transportation facilities, introducing fertilizer and disease- and pest-control measures, initiating agricultural research and education, and supporting local farmers' organizations that channeled technological information, production supplies, and marketing aids to farmers. Agricultural output increased more rapidly than popula-



TOTAL AGRICULTURAL OUTPUT AND POPULATION IN TAIWAN



U.S. DEPARTMENT OF AGRICULTURE
ECON. RES. SERV. 524-10-01 ECONOMIC RESEARCH SERVICE

tion. Large amounts of rice, sugar, and other farm commodities were exported to Japan.

Population Increased

Due to disturbances of war, agricultural production had dropped to less than half of the 1939 level when Formosa was restored to the Republic of China in 1945. Effective rehabilitation and recovery programs, initiated by that government with United States assistance, caused agricultural output to increase quickly in Taiwan to the 1939 prewar peak by 1951. But the population growth rate increased to over 3.5 percent a year in the 1950's as birth rates continued high and death rates declined with improved health and sanitation services. Consequently, Taiwan, like many countries today, was faced with the task of accelerating the rate of growth in agriculture to provide the food required by a higher population growth rate. More production also was required to increase per capita consumption levels to meet demands for food resulting from higher per capita incomes, and to increase exports.

Potentials for obtaining large increases in agricultural production by expanding the land area under cultivation and increasing the irrigated area had been quite fully exploited by 1945. Nearly all of the increase

in crop production since 1945 has resulted from increased production per hectare (2.5 acres) of cultivated land (figure 2). Increased crop production per hectare has been achieved by the introduction of superior crop varieties, improved irrigation facilities, increased multiple-cropping, more effective control of diseases and pests, increased use of fertilizer, and shifting land to labor-intensive crops that have a high value per hectare.

Taiwan owes much of its present economic health to three major developments. The first was land reform. This included reduction of land rentals and, in 1949, sale of government-owned land to farmers, and the land-to-the-tiller program beginning in 1953 under which tenant farmers became land owners. The second was reorganization in 1953 of farmers' associations and cooperatives to put them under more direct control of farmers. The third was agricultural development planning, launched in 1953 with the first of successive 4-year plans, which helped achieve effective use of scarce land, water, fertilizer, and other inputs.

U.S. economic and technical assistance was a major factor contributing to Taiwan's economic development, amounting to \$1.5 billion—about \$100 million a year—since the early 1950's. Economic and technical

assistance in agriculture was carried out effectively through the Chinese-American Joint Commission on Rural Reconstruction.

Multiphase Approach

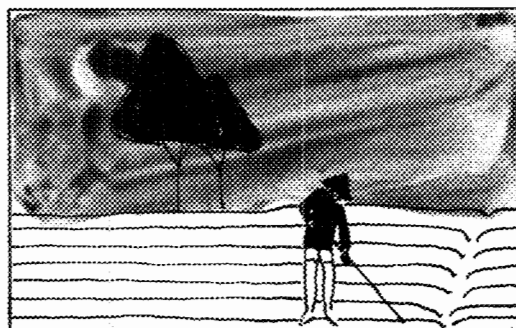
Taiwan's agricultural development strategy was a multiphase approach that gave attention to many things—education, research, extension, credit, price incentives, marketing and storage facilities, and infrastructure for irrigation, drainage, roads, and the like.

Technological innovations were introduced in stages. Agricultural experiment stations carried out the basic research. District agricultural improvement stations located in various parts of the island made field tests, and field demonstrations on farms convinced farmers that the new method, the new fertilizer, pesticide, seed, or breed of animal would be valuable to them.

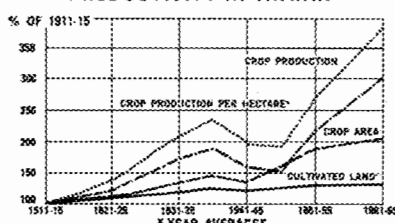
Increased domestic demand, government enterprises, cooperatives and farmers associations have combined to maintain product prices to the Taiwanese farmer at levels high enough for him to make profitable use of fertilizers, new improved seeds and other inputs that help increase crop and livestock yield. Assured market outlets for all the products farmers have available for sale provided economic incentives for farmers to adopt new technology, purchase additional fertilizer and other inputs, and expand agricultural output.

Taiwan's experience indicates that small owner-operated farms can be highly productive if improved technology is available and supporting services are provided. Farms decreased in size from an average of a little over five acres in the early 1950s to about 2.5 acres in 1966. But output and sales per farm increased.

Evidence from Taiwan shows that farm people do respond to economic incentives. They will give up age-old methods for more productive and profitable new ones. And they will shift readily from one crop to another if it means more money for them.



CULTIVATED LAND AND PRODUCTIVITY IN TAIWAN



* Cultivated land is total land area under cultivation. ** Crop production per hectare of cultivated land.
U.S. DEPARTMENT OF AGRICULTURE ECON. RES. SERV. 524-10-01 ECONOMIC RESEARCH SERVICE

(Mr. Hedges from page 5)

As the PSAC Report points out, however, the long-run solution to the food problem in the developing countries is to increase their food producing capacities. This is required not only to avoid mass starvation at some future date, but it is equally essential from the standpoint of economic development.

The developing countries are not likely to progress in their overall economic development unless priority attention is given to their own agricultural development. Given the fact that the vast majority of the population of these countries is engaged in subsistence agriculture, it is clear neither their food requirements nor improved standards of living can be provided unless agricultural production is increased. In most cases the primary source of increased agricultural production must be from increased yields on existing cultivated acres.

A Market Economy

Economically, this means shifting agricultural producers from subsistence farming to a market economy. Most improved technology involves additional inputs that must be purchased. These purchases are in turn not feasible unless markets exist at remunerative prices for the additional output. Much of the debate that has taken place in the past over agricultural development vs. industrial development is therefore academic. Economic development is a closed circle. Agricultural development which involves the application of technology can not take place in isolation. There must be general economic development to provide the requisite seeds, fertilizer, machinery needed for agricultural development, and the markets for the expanded output.

Development assistance must therefore continue to include capital assistance as well as technical assistance if the masses of agricultural producers in the developing countries are to be shifted from subsistence farming to a market economy.

The use of foreign capital and technical assistance to accelerate de-

velopment in the LDCs is a highly complex business, requiring a vast amount and wide variety of information which can only be supplied by research. Neither heavy capital investment nor the injection of technical expertise into these economies can be expected to bring about the same results as similar investments in the more developed countries. Nor can the same results be anticipated in all LDCs. Cultural patterns, political backgrounds, economic resources and institutional processes vary widely, and these variations significantly influence the outcome.

More Research Needed

Research is required in applied physical and biological sciences as well as in the social sciences. Perhaps the most basic limitation to development in most LDCs is pervasive technical and institutional inefficiency. This itself is largely a result of the historic failure of these countries to invest significantly in research and development.

Reducing inefficiencies in the economies of the LDCs is a complicated process, involving the interplay of several factors which are assisted by foreign aid. A major requirement, which has received continuous emphasis from A.I.D. and predecessor agencies, is to build institutional capacity to do adaptive research in the LDCs themselves. This is an absolutely vital but necessarily slow process.

The day when the LDCs can fully satisfy their own research requirements is still far off. The need to accelerate progress in the interim requires that the advanced countries apply some of their accumulated expertise to, simultaneously, screening the deficiencies of the LDCs relative to the "state of the arts" in developed societies, and investing specifically in narrowing this gap.

In the past few years we have had conclusive demonstration that research can radically improve food yields in developing countries. The results achieved with Mexican short strawed wheat which was developed by the Rockefeller research program have been so spectacular that they

have commanded the attention of the world. The results which the International Rice Research Institute in the Philippines is achieving in producing high-yielding strains are scarcely less remarkable. These are beginnings which show the way to a future more promising than the most optimistic would have predicted only a few years back.

But they are only beginnings. As one authority has put it, adaptive research on plants, animals and inputs needs to be extended and intensified to produce an applied science of tropical agriculture, which exists today in only the most rudimentary form. This is essential.

The developing countries lie largely in the tropics, where general climatic and soil conditions would indicate great possibilities for increasing food production. Yet we don't know as much as we should about these tropical soils, or about tropical crop management. Further research into what technology will work in the tropics is necessary if we are to make major advances in food production.

Differing Conditions

The process of research does not stop with the development of the basic breed variety. It must in turn be adapted to the different ecological conditions under which it is to be grown; these will vary considerably from one part of the world to another; so will the mixes of fertilizer, and insecticides required to produce the largest yields at the lowest cost in any given locality. The new short-stemmed varieties are spreading rapidly through many countries; they are now begin grown commercially in Turkey, Mexico, India, Pakistan, and Afghanistan, and are being tested in other parts of Asia, South America and Africa.

Research efforts at the international level have already proved highly successful in improving the effectiveness of national efforts to increase agricultural productivity. Evidence now available shows that great improvements in agricultural productivity could be made and substantial savings in manpower and

money effected, by feeding the results of the work of world centers doing basic research on the principal food crops into national institutions of research and extension. Pakistan, where inputs from the world centers for wheat and rice substantially increased the effectiveness of the national effort, can be cited as a case in point.

Regional Centers

Moreover, experience with a number of regional crop improvement projects demonstrates that regional centers (or regional projects) serving the major ecological regions might provide an effective connecting link between world centers and national institutions of research. Such centers could in some measure compensate for the inadequacies in staff and equipment which handicap the national research efforts of a number of developing countries.

If the War on Hunger is to be won, we must continue to win in the face of fund cuts—to give appropriate attention to research. The Congress has made clear, even though overall aid funds have been cut, that it expects increased emphasis to be given to measures for solving the food/population problem.

Also, if we are to close the food gap, private enterprise must become more involved. This statement is nothing new—the value of private investment and initiative has been recognized since foreign aid programs started. But participation, especially in agricultural development, has lagged. This is not due solely to the reluctance of businessmen to invest in countries where lucrative markets presently do not exist. Many of the countries themselves have been unable or unwilling to convince the businessmen of the United States and other developed countries that long-term investment and planning eventually can be good business for them.

We in government also have had difficulty in providing the direction and information that businessmen need. Incidentally the recent restrictions on overseas investment put into effect as a balance of payments measure hardly affect the less-developed

countries. The new policy, in fact, might tend to encourage American investment in the less-developed countries.

There are, of course, a number of firms now engaged in our programs of nutrition research, and in other endeavors.

Another hopeful development is the recent organization of an Agribusiness Council, composed of private agricultural and food industry leaders. The Council will be actively concerned with agricultural development possibilities in the private sector.

Optimism in AID

We in AID are optimistic about the future. Both on the food production side and the population side we have the means and the resources for assuring victory if we so choose. Of course, we should not minimize the tremendous problems facing us in achieving victory—in closing the gap between the amount of food that will be available 20 years from now, and the number of people who will be needing it. But, I repeat, we have learned a lot in the past 20 years of foreign aid. We have learned much about what works and what does not. We have seen the exciting progress of countries that have used external assistance to advantage and are now on their way to supporting themselves. Above all, we have learned patience.

The next two decades should be exciting. They should forecast a brighter future for mankind. A revolution in food productivity in the developing countries can become a fact within a few years. The prospect of smaller, but healthier, families sharing in the necessities and amenities of life is more than a hope. And the larger vision of a more peaceful world resulting from people who are eating adequately, living longer, better housed, able to read and write and contributing constructively to their environment, is not just an idealistic cliché.

We think it is realistic—and possible—if we have the will and the patience to carry on.

In Print

Recent Publications of Interest

Health Manpower in a Developing Economy—Taiwan, A Case Study in Planning, by Timothy D. Baker and Mark Perlman. The Johns Hopkins Press, Baltimore, 1967. 203 pp. \$6.50. Originally prepared under a grant by the U. S. Agency for International Development.

The effective planning of human resources is essential to the creation of adequate health services in the developing nations. This book is designed to serve a dual purpose: to assist the Government of Taiwan in planning health programs for the next 20 years, and to develop methods of health manpower analysis.

Other studies in The Johns Hopkins Monographs in International Health will consider aspects of health manpower in India, Turkey, and Peru.

* * *

The Legal Base for Universities in Developing Countries, by H. W. Hannah and Robert R. Caughey. University of Illinois Press, Urbana, Ill., 1967. 455 pp. \$10.00.

The authors analyze and discuss the legal structure of many institutions in different parts of the world, express their views on the fundamental items that should be included in university acts and statutes, and show how the legal framework of an institution relates to its educational purpose and the achievement of its goals.

The book is a sequel to Hannah's *Resource Book for Rural Universities* (U. of Illinois Press, 1966), and grew out of Professor Hannah's experience in India on an AID contract, and shorter tours in Nigeria and Pakistan. Both books are designed as working tools for AID-university contractors, and host governments and institutions.

Dr. Hannah is professor of agricultural law and veterinary medical law at the University of Illinois. Robert R. Caughey is a Captain in the Judge Advocate General's Corps of the U. S. Army.

IN BRIEF

Family Planning Activities

Under a three-year contract with AID signed January 19, the Pathfinder Fund will spend \$200,000 during the first year to expand its worldwide family planning activities. Some \$100,000 is earmarked for purchase of contraceptives.

"We are hopeful," said Dr. R. T. Ravenholt, Director of AID's Population Service, "that this AID input into Pathfinder activities will allow this unique organization to expand its services much more rapidly into new areas and strengthen programs already initiated."

Dr. Ravenholt noted that Pathfinder, like other private family planning organizations, is frequently able to spark local interest and develop local programs more successfully than under direct U. S. Government sponsorship.

This is the second contract between AID and Pathfinder. Under a three-year contract signed in June, 1967, \$194,000 has been obligated for research on family planning evaluation.

Pathfinder, a private nonprofit organization based in Boston, has been active in family planning since 1929. As its name implies, the Fund specializes in finding new approaches to encouraging growth of family planning interest. Its role is largely that of a catalyst in helping initiate local action. Once a family planning program has become strong through private or government interest, the Fund moves on to new fields of action.

* * *

LWR Annual Report

During 1967 the Lutheran World Relief shipped 63,777,012 pounds of food, supplied by the U. S. Food for Freedom program, to the needy in eight nations. The commodities, valued at \$3,768,933 were distributed among 670,000 persons, of whom 475,000 were children. Nearly two-thirds of the supplies went to India.

Dominican Development Plan

Five international companies have joined in a consortium to work with the government of the Dominican Republic in an agro-industrial development program on government-owned lands.

The consortium, Agro-Industrial Development Company, S. A., will plan and implement a development program integrated with the government's long-term program for land improvement and broadening of land ownership among Dominican farmers. AID is cooperating with the consortium in preliminary studies.

The group is headed by International Minerals & Chemical Corporation, world supplier of chemical fertilizer materials. Other members are ADELA Investment Company of Luxembourg, a multi-national private investment company; Dow Chemical Company, Midland, Michigan, producer of pesticides and biological products for veterinary use; International Harvester Company, Chicago, manufacturers of tractors and farm equipment; and the Worthington Corporation, Harrison, New Jersey, manufacturer of pumps, electric generators and other machinery.

* * *

PL 480, Title I, in 1967

During 1967, 40 agreements for food sales under Title I of Public Law 480 were signed with 20 countries, involving a total value of \$1.2 billion. About \$900 million of the sales were for local currency, with the remainder divided almost equally between dollar and convertible local currency credit.

* * *

Development in Peru

Peru's new Agricultural Development Law, which goes into effect April 1, is designed to improve utilization of domestic resources by aiding suppliers of farm machinery and chemicals, food processors, and other agri-business companies. The law grants tax incentives to companies producing, processing, and distributing food, in an effort to eliminate importation of basic foodstuffs.

Quotes

"The [population] problem is not simply one of great tragedy—that hundreds of millions of human beings will starve to death in the next few decades. . . . An even greater concern is that civilization itself may not survive such pressure. For population density has other effects: the crime rates rise at a rate proportional to the fourth power of the population density, and increasing mental illness, divorce rates, riots and other forms of social unrest directly reflect increased interpersonal frictions which occur in high population density environments.

" . . . One of the most critical objectives of our time must be to contain the world-wide explosion of population within the next two decades."

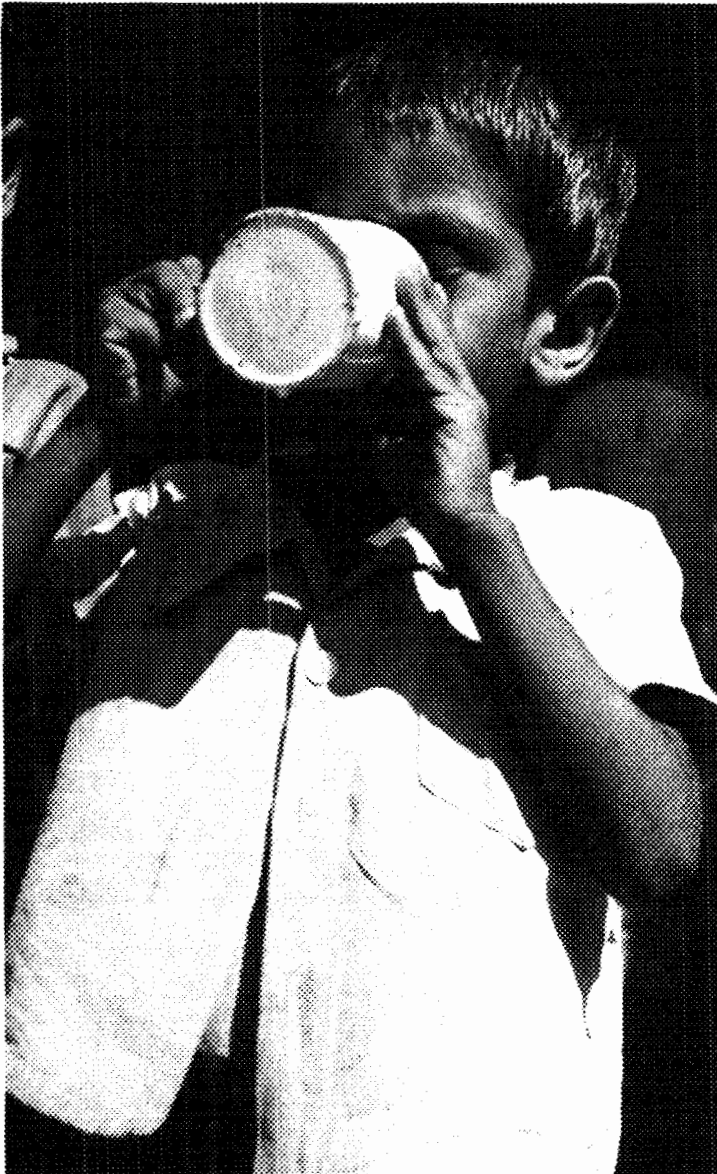
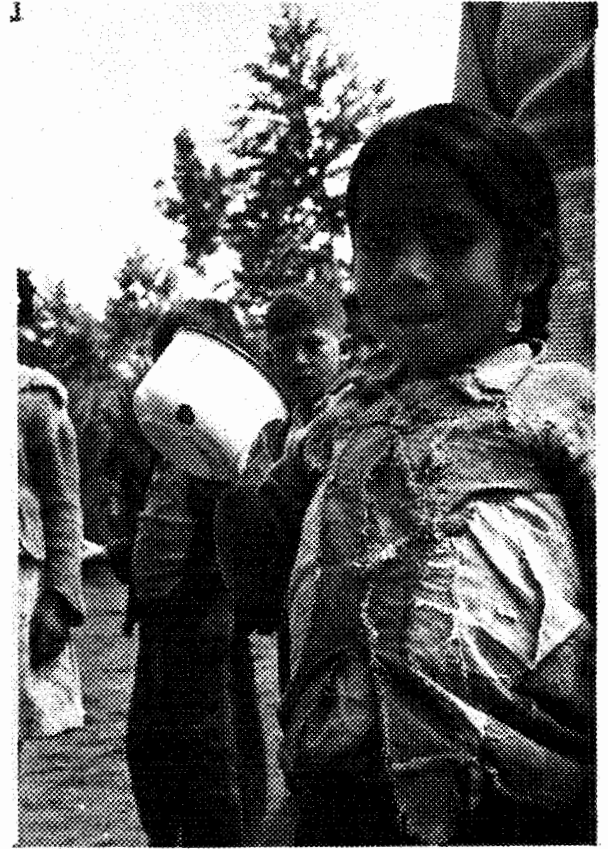
George L. Cadigan,
Episcopal Bishop, St. Louis, in
a Pastoral Letter

* * *

"Numerous types of emergencies—floods, earthquakes, storms—can have disastrous effects upon local areas. It may in fact be much easier to mobilize and deliver food from the developed nations than it is to move food and other necessary items within the affected country. The United States has an unparalleled ability to transport food under emergency conditions to virtually any point in the world. This ability has been called upon a number of times in recent years, and I can see no good reason why this capacity should not be maintained. It is an instrument of goodwill and humanitarianism; it has prevented much human suffering."

D. Gale Johnson
Dean, Division of Social Sciences
University of Chicago



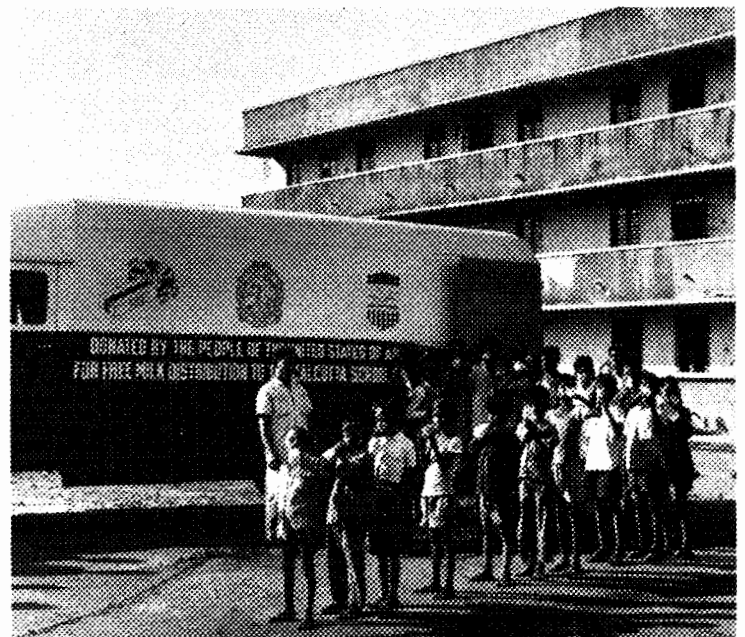


MILK

In recent years, U. S. exports of powdered milk under the Food for Peace program have been in the neighborhood of 300 million pounds per year.

This is a great deal of milk—enough to make 1.5 billion quarts. Much of the milk is used for school lunches, where it fills the cups and containers of children who urgently need the protein it supplies—children like those shown on this page.

The United States ships out a lot of milk. This is where some of it goes.



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What Are They Tasting? See 'Conference,' on page 6

